

CLAIMS

What is claimed is:

1. A method of deriving power for a device from a power source of a fluorescent light, comprising:
 1. electrically connecting a first power coupling to at least a first pin of a fluorescent lamp, said first power coupling being electrically connected to a power converter of the device; and
 2. electrically connecting a second power coupling to at least a second pin of the fluorescent lamp, said second power coupling also being electrically connected to the power converter of the device such that a circuit is completed between the power converter, the first pin and the second pin,
whereby power supplied to the pins by the power source of the fluorescent light will be drawn by the circuit to power the device.
2. The method of claim 1, wherein the first pin is located at a first end of the fluorescent lamp and the second pin is located at a second end of the fluorescent lamp.
3. The method of claim 2, wherein the first power coupling and the second power coupling are each made from a conducting material;
wherein the first power coupling is spaced apart from the first end of the fluorescent lamp and from a first connector in a fluorescent light fixture by one or more first insulating means; and
wherein the second power coupling is spaced apart from the second end of the fluorescent lamp and from a second connector in the fluorescent light fixture by one or more second insulating means.
4. The method of claim 2, wherein the first power coupling and the second power coupling are each configured for making electrical connection with either a bi-pin fluorescent lamp or a single-pin fluorescent lamp.
5. The method of claim 1, wherein the first pin and the second pin are both located at a first end of the fluorescent lamp.

6. The method of claim 5, wherein the first power coupling and the second power coupling are each made from a conducting material; and

wherein the first power coupling and the second power coupling are spaced apart from the first end of the fluorescent lamp and from a connector in a fluorescent light fixture by one or more insulating means.

7. The method of claim 1, wherein at least one of the first power coupling or the second power coupling is electrically connected to the power converter of the device via a power tether.

8. The method of claim 1, wherein at least one of the first power coupling or the second power coupling is electrically connected directly to the power converter of the device.

9. The method of claim 1, wherein the power drawn by the circuit does not impede operation of the fluorescent lamp.

10. The method of claim 1, wherein the device is designed to primarily function as a wireless network component.

11. The method of claim 10, where the device receives network data and control signals from a second wireless network component via wireless communications.

12. The method of claim 10, wherein the device is designed to communicate with a second wireless network component via a power line carrier system.

13. A power source of a fluorescent light configured for supplying power to an external device, comprising:

a fluorescent ballast for receiving an input voltage via an input line and converting said input voltage to a lamp voltage suitable for powering a fluorescent lamp;

a first output line electrically connecting the fluorescent ballast to connectors within a light fixture for outputting the lamp voltage to the connectors; and

a second output line electrically connecting the fluorescent ballast to a power port for outputting an external device voltage to the power port, said external device voltage being suitable for powering the external device.

14. The power source of claim 13, the external device comprises a wireless network component.

15. The power source of claim 13, wherein the power port is integrated within a housing that contains one of the connectors.

16. The power source of claim 13, wherein the power port is mounted on or near the light fixture.

17. The power source of claim 13, further comprising a third output line for extracting network data and control signals from the power line carrier signals on the input voltage.

18. The power source of claim 13, further comprising a signal bypass network electrically connected to input line and to at least one of the first output line and the second output line for allowing power line carrier signals to bypass the fluorescent ballast.

19. A wireless network component that derives power from a power source of a fluorescent light, comprising:

a first power coupling electrically connected to a power converter of the wireless network component and configured for electrically connecting to at least a first pin of a fluorescent lamp; and

a second power coupling electrically connected to the power converter of the wireless network component and configured for connecting to at least a second pin of the fluorescent lamp to thereby complete a circuit between the power converter, the first pin and the second pin,

whereby power supplied to the pins by the power source of the fluorescent light will be drawn by the circuit to power the wireless network component.

20. The wireless network component of claim 19, wherein the first pin is located at a first end of the fluorescent lamp and the second pin is located at a second end of the fluorescent lamp.

21. The wireless network component of claim 20, further comprising:

one or more first insulating means for spacing the first power coupling apart from the first end of the fluorescent lamp and from a first connector in a fluorescent light fixture; and

one or more second insulating means for spacing the second power coupling apart from the second end of the fluorescent lamp and from a second connector in the fluorescent light fixture.

22. The wireless network component of claim 20, wherein the first power coupling and the second power coupling are each configured for making electrical connection with either a bi-pin fluorescent lamp or a single-pin fluorescent lamp.

23. The wireless network component of claim 19, wherein the first pin and the second pin are both located at a first end of the fluorescent lamp.

24. The wireless network component of claim 23, further comprising one or more insulating means for separating the first power coupling and the second power coupling apart from the first end of the fluorescent lamp and from a connector in a fluorescent light fixture.

25. The wireless network component of claim 19, wherein at least one of the first power coupling or the second power coupling is electrically connected to the power converter of the device via a power tether.

26. The wireless network component of claim 19, wherein at least one of the first power coupling or the second power coupling is electrically connected directly to the power converter of the device.

27. The wireless network component of claim 19, further comprising means for receiving data and control signals through the fluorescent light power supply using a power line carrier system.

28. The wireless network component of claim 27, wherein the means for receiving data and control signals comprises a signal bypass network for allowing a power line carrier signal to bypass a ballast of a fluorescent light fixture.

29. A wireless network component that derives power from a power source of a fluorescent light, comprising:

a first power coupling electrically connected to a power converter of the wireless network component and configured for electrically connecting to a first connector within a fluorescent light fixture; and

a second power coupling electrically connected to the power converter of the wireless network component and configured for connecting to a second connector within the fluorescent light fixture to thereby complete a circuit between the power converter, the first connector and the second connector,

whereby power supplied to the first connector and second connector by the power source of the fluorescent light will be drawn by the circuit to power the wireless network component.

30. The wireless network component of claim 29, wherein the wireless network component is housed in a housing shaped substantially similar to a fluorescent lamp; and

wherein the first power coupling is positioned at a first end of the housing and the second power coupling is positioned at a second end of the housing.

31. The wireless network component of claim 30, wherein the first power coupling and the second power coupling are each shaped to mimic one or more pin of the fluorescent lamp.

32. The wireless network component of claim 30, wherein the housing further comprises a compartment for receiving one or more fluorescent lamp; and

wherein the first power coupling is electrically connected to the power converter of the wireless network component via the one or more fluorescent lamp.

33. The wireless network component of claim 30, further comprising at least one external antenna.

34. The wireless network component of claim 30, further comprising at least one jack for connecting a removable external antenna.

35. A method of deriving power for a device from a power source of a fluorescent light, comprising:

electrically connecting a first power coupling to at least a first pin of a fluorescent lamp, said first power coupling being electrically connected to a power converter of the device; and

electrically connecting a second power coupling to at least one connector located on a lighting fixture designed to accept a fluorescent lamp, said second power coupling also being electrically connected to the power converter of the device such that a circuit is completed between the power converter, the first pin and the connector located on the lighting fixture,

whereby power supplied to the pins by the power source of the fluorescent light will be drawn by the circuit to power the device.

36. The method of claim 35, wherein the power drawn by the circuit does not impede operation of the fluorescent lamp.

37. The method of claim 35, wherein the device is designed to primarily function as a wireless network component.

38. A method of deriving power for a device from a power source of a fluorescent light, comprising:

electrically connecting a power converter of the device to a first point within a circuit that supplies power from the power source to a fluorescent lamp; and

electrically connecting the power converter to a second point within the circuit that supplies power from the power source to the fluorescent lamp such that a second circuit is completed between the power converter, the first point and the second point,

whereby power supplied to the circuit that supplies power from the power source to the fluorescent lamp will be drawn by the second circuit to power the device.

39. The method of claim 38, wherein the power converter is electrically connected to the first point and the second point via at least one power coupling.

40. The method of claim 38, wherein the power converter is electrically connected to at least one of the first point or the second point via a power tether.

41. The method of claim 38, wherein the device is designed to primarily function as a wireless network component.

42. The method of claim 38, wherein at least one of the first point or the second point comprises a pin of the fluorescent lamp.

43. The method of claim 38, wherein at least one of the first point or the second point comprises a connector within a fluorescent light fixture designed to receive a pin of the fluorescent lamp.